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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/753,462	01/04/2001	Peter Piepkorn	Q62439	3407
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SUGHRUE, MION, ZINN, MACPEAK & SEAS, PLLC 2100 Pennsylvania Avenue, N.W. Washington, DC 20037-3213			ELALLAM, AHMED	
			ART UNIT	PAPER NUMBER
			2662	
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Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/753,462	PIEPKORN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	AHMED ELALLAM	2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 February 2005.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-14 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-14 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 28 February 2005 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/28/2005</u> . | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 5, 7, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoen et al, Convergence Between Public Switching and the Internet, pages 50-65, IEEE Communication magazine 1998, in view Sundermier, US (6,484,214) referred to hereinafter respectively as Schoen and Sundermier.

Regarding claim 1, with reference to figure 9, Schoen discloses an internet client (claimed subscriber), a local exchange, (claimed exchange), a server (claimed service computer), wherein a subscriber is enabled to configure supplementary services (claimed telecommunications service data) through a graphical user interface using a web application, see page 57. (Claimed subscriber with a terminal can access a user interface of the service computer via the Internet, wherein the subscriber can manipulate telecommunications service data via the user interface and wherein the exchange can provide telecommunications services with the aid of the telecommunications service data, characterized in that a connection is established between the exchange and the service computer). Schoen further discloses with reference to figure 10, an e-mail functionality as an example of a supplementary service

(indicated above), the e-mail is sent to by mail server (claimed service computer in this example) as TCP/IP indication to the Local exchange, see left column page 58.

Regarding claim 7, with reference to figure 9, Schoen discloses an internet client (claimed subscriber), a local exchange, (claimed exchange), a server having a www application (claimed service having a user interface which a subscriber with a terminal can access via the Internet), wherein a subscriber is enabled to configure supplementary services (claimed telecommunications service data) through a graphical user interface using a web application, see page 57. (Claimed service computer having a user interface which a subscriber with a terminal can access via the Internet and via which the subscriber can manipulate telecommunications service data with the aid of which the exchange can provide telecommunications services). Schoen further discloses with reference to figure 10, an established TCP/IP connection between the Exchange and the server, and Schoen gives an e-mail functionality as an example of a supplementary service (indicated above), the e-mail is sent to by mail server (claimed service computer in this example) as TCP/IP indication to the Local exchange, see left column page 58. (Examiner interpreted the TCP/IP indication sent from the mail server to the local exchange on the established TCP/IP connection as being the claimed service computer has connecting means which are designed in such a way that the service computer can establish a connection to the exchange and in that the connecting means are furthermore designed in such a way that the service computer can transmit data for the provision of telecommunications services for the subscriber on the connection to the exchange, also examiner interpreted the mail sever capability of

transmitting the e-mail indication as having a memory or storage of holding e-mail messages which read on the claimed memory means, because that is necessary for the e-mails not being lost before transmission to the exchange).

Regarding claim 9, with reference to figure 9, Schoen discloses an IPOP (Internet point of presence) for a local exchange (claimed interface device for an exchange) for transmitting telecommunications service data between the exchange and a server (claimed service computer), the exchange having subscriber data (claimed service provision means of the exchange), an internet client (claimed subscriber with a terminal), the server having a www application, wherein a subscriber is enabled to configure supplementary services (claimed telecommunications service data) through a graphical user interface using a web application, see page 57 and figure 9. (Claimed service computer has a user interface which a subscriber with a terminal can access via the Internet and via which the subscriber can manipulate telecommunications service data which can be used for the provision of telecommunications services by a service provision means of the exchange). Schoen further discloses with reference to figure 10, an established TCP/IP connection between the Exchange and the server (claimed interface device has connecting means which are designed in such a way that the interface device or the service computer can establish a connection between the exchange and the service computer), further Schoen discloses an e-mail functionality as an example of a supplementary service (indicated above), the e-mail is sent to by mail server (claimed service computer in this example) as TCP/IP indication to the Local exchange, see left column page 58. (Claimed interface device has transmitting and

receiving means which are designed in such a way that the interface device can transmit data for the provision of telecommunications services for the subscriber through the exchange on the connection between the exchange and the service computer).

Regarding claim 10, with reference to figure 9, Schoen discloses an exchange with an IPOB (Internet point of presence) (claimed an exchange with an interface device) for transmitting telecommunications service data between the exchange and a server (claimed service computer), the exchange having subscriber data (claimed service provision means of the exchange), an internet client (claimed subscriber with a terminal); the server having a www application, wherein a subscriber is enabled to configure supplementary services (claimed telecommunications service data) through a graphical user interface using a web application, see page 57 and figure 9. (Claimed service computer has a user interface which a subscriber with a terminal can access via the Internet and via which the subscriber can manipulate telecommunications service data which can be used for the provision of telecommunications services by a service provision means of the exchange). Schoen further discloses with reference to figure 10, an established TCP/IP connection between the Exchange and the server (claimed interface device has connecting means which are designed in such a way that the interface device or the service computer can establish a connection between the exchange and the service computer), further Schoen discloses an e-mail functionality as an example of a supplementary service (indicated above), the e-mail is sent to by mail server (claimed service computer in this example) as TCP/IP indication to the Local

exchange, see left column page 58. (Claimed interface device has transmitting and receiving means, the interface device can transmit data for the provision of telecommunications services for the subscriber through the exchange on the connection between the exchange and the service computer).

Schoen does not disclose that the TCP/IP indication (claimed telecommunication service data) sent from the mail server to the local exchange is in the form of objects (as in claims 1, 7-10) and the object are CORBA object (object request-broker-object) (as in claim 2).

However, Sundermier discloses COBRA object transmission between client (claimed exchange) and servers (claimed server computer). See column 51-67 and column 2, lines 1-67.

Therefore, It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to enable the exchange and server(s) of Schoen to use CORBA objects for transmission of supplementary services as indicated by Sundermier (column 2, lines 11-19) so that the exchange of Schoen can remotely interact with the server, regardless of what kind of platform server is running (Sundermier, column 1, lines 58-62). The advantage would be the ability to configure supplementary data by a subscriber of Schoen using any WWW browser from anywhere in the world using the well-established CORBA protocol.

Regarding claim 5, Schoen discloses an e-mail TCP/IP indication from the server (mail server) to the exchange, wherein the subscriber can retrieve the e-mail from the local exchange database based on the indication. See figure 10. (Claimed the service

computer of the exchange transmit configuration settings for telecommunication services as data for the provision of telecommunication services).

2. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoen et al, Convergence Between Public Switching and the Internet, pages 50-65, IEEE Communication magazine 1998, in view of Sundermier and further in view of Allard et al, US (6,067,559), referred to hereinafter as Allard.

Regarding claim 8, with reference to figure 9, Schoen discloses an internet client (claimed subscriber), a local exchange, (claimed exchange), a server (claimed service computer), wherein a subscriber is enabled to configure supplementary services (claimed telecommunications service data) through a graphical user interface using a web application, see page 57. Schoen further discloses with reference to figure 10, an established TCP/IP connection between the Exchange and the server, and Schoen gives an e-mail functionality as an example of a supplementary service (indicated above with reference to claim 1), the e-mail is sent to by mail server (claimed service computer in this example) as TCP/IP indication to the Local exchange, see left column page 58. (Examiner interpreted the TCP/IP connection between the exchange and the server as being the claimed the service computer can establish a connection to the exchange, the service computer can transmit data for the provision of telecommunications services for the subscriber on the connection to the exchange, and the mail sever capability of transmitting the e-mail indication as having a memory or storage of holding e-mail messages, which read on the claimed service computer can store the

Art Unit: 2662

telecommunications service data in a memory, because that is necessary for the e-mails not being lost before transmission to the exchange, Examiner also interpreted the e-mail indication as the claimed object). (Corresponding to service computer for transmitting telecommunications service data between an exchange and the service computer which has a user interface which a subscriber with a terminal can access via the Internet and via which the subscriber can manipulate telecommunications service data with the aid of which the exchange can provide telecommunications services, service computer can store the telecommunications service data in a memory, the service computer can establish a connection to the exchange, the service computer can transmit data for the provision of telecommunications services for the subscriber on the connection to the exchange).

Schoen does not disclose that the TCP/IP indication (claimed telecommunication service data) sent from the mail server to the local exchange is in the form of objects

However, Sundermier discloses CORBA object transmission between client (claimed exchange) and servers (claimed server computer). See column 51-67 and column 2, lines 1-67.

Therefore, It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to enable the exchange and server(s) of Schoen to use CORBA objects for transmission of supplementary services as indicated by Sundermier (column 2, lines 11-19) so that the exchange of Schoen can remotely interact with the server, regardless of what kind of platform server is running (Sundermier, column 1, lines 58-62). The advantage would be the ability to configure supplementary data by a

subscriber of Schoen using any WWW browser from anywhere in the world using the well-established CORBA protocol.

Schoen in view of Sundermier do not disclose a program module having instruction for the server (service computer) to store the telecommunications service data in a memory, establish a connection to the exchange, and transmit data for the provision of telecommunications services for the subscriber.

However, with reference to figure 5, Allard discloses in the same field of server computer having program modules having instructions for implementing various functionalities of the server computer, see column 8, lines 46-67 and column 9, lines 1-22. (Examiner interpreted the program module(s) of Allard as being equivalent to the claimed a program module having instruction for the server (service computer) to store the telecommunications service data in a memory, establish a connection to the exchange, and transmit data for the provision of telecommunications services for the subscriber on the connection to the exchange). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to implement a program module similar to that taught by Allard and having instruction codes to be used in the server of Schoen in view of Sundermier so to implement the storing of service data, establish the connections to the exchange and to transmit data to the exchange and any necessary functions that are required for the server's operations. An artisan would be motivated to do so, because that is needed for the server of Schoen in view of Sundermier to implement various tasks as known in the art.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoen in view of Sundermier and further in view of admitted prior art, page 2, lines 2-11.

Regarding claim 3, Schoen in view of Sundermier discloses substantially all the limitations of parent claim 1 as discussed above, in addition, with reference to figure 9, Schoen discloses an IPOP (claimed interface module) interfacing the server, the IPOP is connected upstream of the "subscriber data" (claimed service provision module) of the local exchange (claimed an interface module is used for the connection to the service computer, which interface module is connected upstream of a service provision module of the exchange).

Schoen in view of Sundermier do not disclose configuring (supplementary services) using a telephone connection. (Claimed data for providing telecommunication services can also be manipulated by the subscriber via a telephone connection).

However, the prior art discloses that a subscriber uses his telephone to access personal data and input data changes, see page 2, lines 2-11. (Claimed data for providing telecommunication services can also be manipulated by the subscriber via a telephone connection). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to enable the subscriber of Schoen in view of Sundermier to manipulate data service using a telephone connection (see figure 11 of Schoen) as taught in the prior art so that the subscriber of Schoen in view of Sundermier would be able to configure supplementary services without being logged into the Internet. The advantage would be the ability of Schoen to alternately use either

Art Unit: 2662

a telephone or Internet connection to configure his supplementary services (claimed communications data services).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoen in view of Sundermier and further in view of White US (6,069,890). Hereinafter referred to as White.

Regarding claim 4, Schoen discloses substantially all the limitations of parent claim 1, except it doesn't disclose the server determine the object reference of the exchange or in that the exchange determines the object reference of the server (with the aid of a name server), and the objects are transmitted between the exchange and the server with the aid of the respective object reference.

However, Sundermier discloses that a client access objects at a server, using a reference to the remote object. It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to implement the object reference determination as taught by Sundermier in transmitting data between the exchange and the server of Schoen so that CORBA protocol can be used. The advantage would be the ability of Schoen's subscribers to remotely invoke the supplementary services.

Schoen/Sundermier do not disclose that the determination of the object reference is carried out with the aid of Name server.

However, White discloses a Domain Name Sever DNS server (claimed name server) that provide the translation from a domain or host name supplied by a subscriber into an IP address, see column 10, lines 66-67 and column 11, lines 1-11.

(Claimed determination of the object reference is carried out with the aid of Name server).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to use a DNS server (claimed domain name) as taught by White in determining the object references of Schoen/Sundermier so that object-reference determination can be carried out in using a standard operating protocol for the Internet. The advantage would be the ability of exchanging data from a plurality of distributed server to the exchange of Schoen/Sundermier in a standard known protocol (i.e., DNS).

5. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoen in view Sundermier and further in view Roberts et al, US (6,295,551). Referred to hereinafter as Roberts.

Regarding claim 6, Schoen in view of Sundermier discloses substantially all the limitations of base claim 1, except it does not explicitly disclose the server and the exchange transmit, as data for the provision of telecommunications services, data with which the exchange and the server (service computer) can provide telecommunications services interactively. (Examiner interpreted the interactive limitation of claim 6 in light of the specification, as being having a firewall to restrict user access to non-authorized information).

However, with reference to figure 6, Roberts discloses a firewall 192 between a subscriber computer 12 and network 16 to restrict user access to information server 20. See column 19, lines 42-55.

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made to implement the fire walling method of Roberts in the system of Schoen in view of Sundermier so that the subscribers of Schoen in view of Sundermier can access their supplementary services in a restrictive manner. It would be also advantageous to block non-authorized users to access the system of Schoen in view of Sundermier.

6. Claims 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoen in view of Sundermier as applied to claims respective claims 7, 9 and 10 above, and further in view of MeLampy et al, US (6,697,475). Hereinafter referred to as MeLampy.

Regarding claims 11, 13 and 14, Schoen in view of Sundermier discloses the elements of parent claims 7, 9 and 10 as discussed above, except they don't specify transmitting configuration setting for telecommunications services for the provision of telecommunications services for the subscriber.

However, MeLampy with reference to figure 3, discloses a SMP (service Management point) that distribute logic to a programmable switch at end office using a TCP/IP connection, the logic for configuring telecommunications services for the provisioning of telecommunication services to the user. See Abstract, and column 2,

lines 45-66. (Claimed transmitting configuration setting for telecommunications services for the provision of telecommunications services for the subscriber). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to enable the server/or interface of Schoen in view of Sundermier to transmit configuration setting for telecommunications services for the provision of telecommunications services for the subscriber to the exchange as taught by MeLampy so that dynamic configuration of EO (end office) services can be provided upon user request using the internet. The advantage would be the ability to centralize the configuration of subscribers' services of Schoen in view of Sundermier, using the Internet on a call by call basis, the subscribers belonging to different end switching offices, and to minimize the cost upon the emergence of new services by simply modifying the software languages. (MeLampy, column 3, lines 11-35).

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoen in view of Sundermier in view of Allard as applied to claim 8 above and further in view of MeLampy.

Regarding claim 12, Schoen in view of Sundermier in view of Allard discloses the limitations discussed above in claim 8, except they don't specify transmitting configuration setting for telecommunications services for the provision of telecommunications services for the subscriber.

However, MeLampy with reference to figure 3, discloses a SMP (service Management point) that distribute logic to a programmable switch at end office using a

Art Unit: 2662

TCP/IP connection, the logic for configuring telecommunications services for the provisioning of telecommunication services to the user. See Abstract, and column 2, lines 45-66. (Claimed transmitting configuration setting for telecommunications services for the provision of telecommunications services for the subscriber). It would have been obvious to a person of ordinary skill in the art, at the time the invention was made to enable the server/or interface of Schoen in view of Sundermier in view of Allard to transmit configuration setting for telecommunications services for the provision of telecommunications services for the subscriber to the exchange as taught by MeLampy so that dynamic configuration of EO (end office) services (subscriber services) can be provided upon users requests using the internet. The advantage would be the ability to centralize the configuration of subscribers' services of Schoen in view of Sundermier in view of Allard, using the Internet on a call by call basis, the subscribers belonging to different end switching offices, and to minimize the cost upon the emergence of new services by simply modifying the software languages. (MeLampy, column 3, lines 11-35).

#### ***Response to Arguments***

8. Applicant's arguments filed 2/28/2005 have been fully considered but they are not persuasive:

Applicants argue, "...the system shown in figure 10 of Schoen, what is sent by the mail server to the local exchange is an e-mail indication. A skilled artisan would appreciate that the e-mail waiting in Schoen is only a TCP/IP indication, and is not in the form of objects". While the argument is moot in light of the new ground of rejection,

Examiner asserts that that the previously claimed "objects" have a broad meaning, and that the TCP/IP indication can be considered an object, because the term object can be any set of data structure by one of the definitions term object. Moreover, Applicants relied on the passage in the specification ((page 12) that specify that the object are CORBA objects that can be transmitted in the context of TCP/IP. However, the reference to objects of being related to the CORBA protocol is not specified in any of the independent claims, and reference to the object of being object-request broker objects as in dependent claim 2 cast a doubt to what else the claimed "objects" in independent claims refer to. It is within these remarks that Examiner believes that the previous rejection was proper.

Claim 2:

With regard to claims 2, Applicants argue that Schoen does not indicate in any way that data in the object form is preferable in the system shown in figure 10, and that given the different goal of Schoen and Sundermier, there is no motivation or suggestion to combine Schoen and Sundermier. Examiner respectfully disagree, A person of skill in the art will recognize the benefit of implementing the COBRA object transmission between client and servers as taught by Sundermier, (see column 51-67 and column 2, lines 1-67) to enable the exchange and server(s) of Schoen to use CORBA objects for transmission of supplementary services as indicated by Sundermier so that the exchange of Schoen can remotely interact with the server, regardless of what kind of platform server is running (Sundermier, column 1, lines 58-62). The advantage would be the ability to configure supplementary data by a subscriber of Schoen using any WWW

Art Unit: 2662

browser from anywhere in the world using the well-established CORBA protocol. In addition CORBA protocol is a well established protocol that provides a standard interface for interoperability between object management systems residing on disparate platforms, a skilled artisan would know the advantage of implementing the CORBA protocol in transmitting data between the exchange and the server of Schoen without even relaying on Sundermier, since doing so would enable the exchange and the server to operate each on different object-oriented platforms, while being able to exchange data information.

Claims 3, 4, 6:

Applicant argument is moot in view of the new ground of rejection.

Claims 11-14:

Applicants argue that newly added claims 11-14 are patentable over Schoen, "because the system shown in figure 9 of Schoen is used for configuring supplementary services by a user for his PSTN/ISDN line, but HTML documents are used. HTML documents are programmed by a certain type of language, and are not in object forms". Examiner respectfully disagrees, the HTML language uses applets, and the applets can be regarded as object, since the claims do not specify what type of objects, the HTML browser used in configuring the supplementary services can read on the limitations of the added claims 11-14. Nevertheless, Examiner has rejected the new claims as indicated above, and believe that data can be exchanged between the server and the exchange in the form of object given the knowledge available to a person of skill in the art, in this case the CORBA protocol.

Examiner concludes that the main feature that Applicants regard as the invention is that configuration data of communications services being transmitted between a computer and the exchange in the form of object, is a knowledge known in the art at the time of the invention, and a skilled person would use the CORBA protocol in carrying out the configurations exchange between the switch and the server of Schoen without need to any other prior art teaching.

***Conclusion***

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Chang et al, US (5,958,016); Pullen et al, US (6,286,050); Alberts, US (6,650,633); and Silva et al, (6,898,199).

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to AHMED ELALLAM whose telephone number is (571) 272-3097. The examiner can normally be reached on 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kizou Hassan can be reached on (571) 272-3088. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AHMED ELALLAM  
Examiner  
Art Unit 2662  
7/1/2005

1.



JOHN PEZZLO  
PRIMARY EXAMINER